

**Study of the Nursing Management of Patients
with Leg Ulcers in the Community**

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1992

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ABSTRACT

Chronic leg ulcers affect at some point in time about 1% of the U.K. population, with women over 75 being the most susceptible. Leg ulcers follow a cyclical pattern of ulceration, healing and reulceration. 25% of leg ulcers are thought to be open at any one point in time, with the lesions remaining open for months or even years. Leg ulcers most commonly occur in association with venous and arterial disease. Known risk factors are increasing age, female sex and venous disease. Care of patients with leg ulcers is estimated to cost between £300 - £600 million annually. More than 80% of patients are cared for by nurses in the community who are often responsible for deciding upon their treatment. Not all patients with leg ulcers are seen by a GP or consultant for a medical diagnosis of their type of ulcer. The management of leg ulcers by district nurses is an important area, since by April 1993 community nurses who have undergone the appropriate training will be able to prescribe topical applications, dressing products and bandages.

The objectives of this study were;

- i) To describe current practice of community nurses in the management of leg ulcers. This includes the range of dressings, topical applications and bandages used and their advice to patients about lifestyle, nutrition, exercise, pain control and self care.
- ii) To investigate the nurses' knowledge of the various types of leg ulcer and the scientific rationale underlying their choice of dressings, topical applications and bandages.
- iii) To establish the extent to which nursing care is appropriate in terms of current scientific evidence; and to identify educational initiatives to improve nursing practice.

146 community nurses from three District Health Authorities and Community Trusts were included in the study, each district nursing sister completed a semi -

structured questionnaire. Data included; nurses' biographical details, clinical practice details relating to, assessment, topical applications, dressings and bandages used, constraints upon their practice and their advice to patients about lifestyle, exercise, pain control and self care. Data were analysed using SPSS/PC (4.0). The survey was essentially descriptive but where appropriate relationships between variables using Chi squares were obtained.

Significant differences with how nurses managed patients' ulcers were found according to when they qualified as a district nurse. Nurses who qualified after the revised syllabus in 1981, were more likely to base their practice on research - based wound management compared to nurses who qualified before 1981, who were also least likely to have received any form of continuing education. Nurses who qualified after 1981 were significantly more likely (59(69%)) to have attended a course on leg ulcer management than nurses who qualified before 1981 (31(52%)) (95% C.I.[1%,33%]; $X^2=4.70$; $df=1$; $p=0.03$). The majority of nurses (80 (55%)) did not assess patients' experience of pain, which is of concern as the presence of pain should feature as part of any nursing assessment. The more recently qualified nurses (44 (52%)) were significantly more likely to include pain as part of their assessment than nurses who qualified before 1981 (21(35%)) (95% C.I.[1%,33%]; $X^2=4.00$; $df=1$; $p=0.05$). Nurses who had qualified after 1981 were also significantly more likely (44(52%)) to use semi-permeable films as dressings than nurses who qualified before 1981 (16(27%)) (95% C.I.[10%,40%]; $X^2=9.13$; $df=1$; $p<0.01$). And, the more recently qualified nurses were less likely (8(9%)) to apply antibiotic tulle to leg ulcers than nurses who qualified before 1981 (17(28%)) (95% C.I.[-34%,-8%]; $X^2=8.83$; $df=1$; $p<0.01$). 128 (89%, 95% C.I.[84%,94%]) nurses used a combination of dressing products together layering primary dressings on top of one another eg. alginates beneath hydrocolloids, desloughing agents beneath hydrocolloids and desloughing agents beneath alginates. As there is no demonstrated therapeutic value this could be an expensive practice and could increase the likelihood of patients experiencing allergic reactions. Only 33 (23%, 95% C.I.[16%,30%]) nurses were using bandages that could achieve a therapeutic level of compression. There is the

potential for a review of this practice to facilitate a more effective use of resources here. 91 (63%, 95% C.I.[55%, 71%]) nurses reported that they would refer patients to the GP for medical opinion if the ulcer was not healing. Although most nurses, 125 (86%, 95% C.I.[80%, 92%]) understood that leg elevation was important for patients with venous ulcers, few realised it was contraindicated in the presence of arterial disease. 45 (41%, 95% C.I.[32%, 50%])(n = 111) nurses recommended that patients with arterial ulcers elevate their legs, which denotes a less than adequate understanding of the underlying pathology and circulatory physiology.

It is recommended that patients with leg ulcers have an accurate medical diagnosis of their type of ulcer, a comprehensive nursing assessment and their care planned and co - ordinated on the basis of good practice. Patient care would be improved if agreed treatment protocols formulated by members of the primary health care team and F.H.S.A information pharmacists could be established so that there is efficient use of resources. There is also a need for District Health Authorities and Community Trusts to investigate specific constraints which compromise community nurses' clinical practice, for example nurses should be able to access sphygmomanometers and Dopplers. Improved knowledge by community nurses into aspects of physiology, microbiology and wound healing in relation to leg ulcers and the appropriate products used for their treatment is required. If a high standard of care is to be guaranteed for patients with leg ulcers then a commitment must be made to the continuing education needs of community nurses; support is needed for creative educational initiatives designed to disseminate research evidence to all community nurses who care for patients with leg ulcers.

